

Affective, Continuance, and Normative Commitment to the Organization: An Examination of Construct Validity

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Within the past few years, several studies have used the Affective, Continuance, and Normative Commitment Scales (Allen & Meyer, 1990; Meyer & Allen, 1984, 1991) to assess organizational commitment. The purpose of this paper is to review and evaluate the body of evidence relevant to the construct validity of these measures. Although some empirical questions remain at issue, the overall results strongly support the continued use of the scales in substantive research. © 1996 Academic Press, Inc.

Within the past several years, organizational commitment has emerged as a central concept in the study of work attitudes and behavior (e.g., Mathieu & Zajac, 1990; Meyer & Allen, 1991; Morrow, 1993; Reichers, 1985). This is due in large part to the demonstrated links between organizational commitment and two variables of considerable importance to the study of vocational behavior: turnover intentions and actual turnover. More recently, commitment has been linked to various other forms of work and nonwork behavior (e.g., Hackett, Bycio, & Hausdorf, 1994; Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989; Randall, Fedor, & Longenecker, 1990; Wahn, 1993). Finally, there is evidence that the contribution of organizational commitment to these variables is independent of that made by other work attitude constructs such as job satisfaction (Morrow, 1993; Tett & Meyer, 1993).

Organizational commitment can be defined generally as a psychological link between the employee and his or her organization that makes it less likely that the employee will voluntarily leave the organization. Although early work in the area was characterized by various, and often conflicting, unidimensional views of the construct, organizational commitment is now widely recognized as a multidimensional work attitude (see Becker, 1992; Mathieu & Zajac, 1990; Mayer & Schoorman, 1992; Meyer & Allen, 1984,

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1991; Morrow, 1993; O'Reilly & Chatman, 1986). Not surprisingly, some of the conceptual changes in the study of organizational commitment have been accompanied by efforts to refine the measurement of the commitment construct.

One program of research in which conceptual and measurement work have gone hand in hand has resulted in a three-component view of commitment (Allen & Meyer, 1990; Meyer & Allen, 1991). According to this perspective, the psychological linkage between employees and their organizations can take three quite distinct forms, each of which is given a distinguishing label. Affective commitment refers to identification with, involvement in, and emotional attachment to the organization. Thus, employees with strong affective commitment remain with the organization because they want to do so. Continuance commitment refers to commitment based on the employee's recognition of the costs associated with leaving the organization. Employees with strong continuance commitment, then, remain with the organization because they have to do so. Finally, normative commitment refers to commitment based on a sense of obligation to the organization. Employees with strong normative commitment remain because they feel they ought to do so. As can be seen, all three components of commitment have straightforward implications for staying with (or leaving) an organization, but beyond that, are conceptually quite different. Given these differences, commitment is most meaningfully assessed using three separate measures. Two of the commitment measures developed on the basis of this model were first used in published research by Meyer and Allen (1984), and the third, by Allen and Meyer (1990). Since then, the measures, referred to as the Affective, Continuance, and Normative Commitment Scales, have been administered in several studies. Consequently, there now exists a considerable body of evidence regarding the psychometric properties of the measures and their relations with other organizational and person variables.

In this paper, we examine the construct validity of the three commitment scales by reviewing research in which they have been used. Following Schwab's (1980) recommendations concerning the validation of measures used in organizational research, we begin by examining the reliability of the three scales. This is followed by an examination of their factor structures. Next we review the evidence concerning relations between the commitment scales and other variables that are hypothesized, in the three-component model (Meyer & Allen, 1991), to be antecedents and consequences of commitment. These hypothesized relations provide a "nomological net" (Cronbach & Meehl, 1955) to be used in the validation process. If the overall pattern of relations obtained empirically is consistent with that proposed, it provides evidence that the commitment scales are measuring the constructs as intended.

MEASURES OF AFFECTIVE, CONTINUANCE, AND NORMATIVE COMMITMENT

The development of the Affective, Continuance, and Normative Commitment Scales (ACS, CCS, and NCS, respectively) was based on the scale

construction principles outlined by Jackson (1970) and is described in detail elsewhere (Allen & Meyer, 1990). Briefly, definitions of the three constructs were used to develop an initial pool of items that was then administered to an occupationally and organizationally heterogeneous sample with a fairly balanced gender representation. Items were selected for inclusion in the scales on the basis of a series of decision rules that took into account the endorsement proportions associated with each item, item-scale correlations, content redundancy, and the desire to include both positively and negatively keyed items. Each of the three scales resulting from this process comprises eight items. Respondents indicate their degree of agreement or disagreement with each item and scale scores are calculated by averaging across item responses.¹

DESCRIPTION OF THE SAMPLES

The data summarized in this paper are based on over 40 employee samples, representing more than 16,000 employees from a wide variety of organizations and occupations.² In each sample, employees responded to at least one of the three commitment measures described above. The Social Science Citation Index, up to the middle of 1994, was used to locate each published article that cited the research of direct relevance to the measures (i.e., Allen & Meyer, 1990; Meyer & Allen, 1984; 1991). A manual search of these articles was conducted to isolate those that reported primary research using the measures. A similar search was conducted using Dissertations Abstracts International. Finally, to locate unpublished work, other than that we were already aware of, primary authors of published work were contacted and asked whether they had done any other research using one or more of the commitment measures. Where necessary, we also obtained from primary researchers additional data that were not presented in the research reports, but that we judged to be instructive for our purposes (e.g., reliabilities).

EVIDENCE OF CONSTRUCT VALIDITY

As Schwab (1980) noted, several quite different kinds of evidence can be used to evaluate the construct validity of a set of conceptually related measures. The following section is organized around the three forms of evidence mentioned above: reliability of the measures, factor analytic results, and patterns of correlations between the commitment measures and other variables.

Estimates of Reliability

Internal Consistency

Typically, the internal consistency of the measures has been estimated using coefficient alpha. Reliabilities associated with each sample are shown

¹ Shorter six-item versions of the measures have recently been developed (Meyer, Allen, & Smith, 1993); these will be discussed later in the paper.

² A description of all samples is available from the authors.

in Table 1. Median reliabilities, across both versions of the ACS, CCS, and NCS are .85, .79, and .73, respectively, and with very few exceptions, all reliability estimates exceed .70.

Test-Retest Reliability

Although most studies using the commitment measures have been cross-sectional, some longitudinal data are available. Available test-retest reliabilities are shown in Table 2. As can be seen, the duration between administrations ranged from 7 weeks to 11 months and, in all but one study (Blau, Paul, & St. John, 1993), longitudinal data were collected from organizational newcomers.

All the test-retest reliabilities are within an acceptable range and consistent with those reported for comparable measures (e.g., the Organizational Commitment Questionnaire; see Mowday, Steers, & Porter, 1979). It will be noted, however, that the lowest reliabilities are those involving commitment measures taken on employees' first day at the organization (Vandenberg & Self, 1993). Employees may find it difficult to respond meaningfully to commitment items when they have almost no experience with the organization. Also noteworthy is that the higher reliabilities reported are those based on data obtained during the latter part of the newcomers' first year in the organization. This pattern is consistent with that found with other measures of organizational attitudes (Vandenberg & Self, 1993) and may reflect something about the stabilization of attitude that occurs as newcomers gain experience with their organizations (Mowday, Porter, & Steers, 1982).

Factor Analytic Evidence

The factor structure of the commitment measures has been examined in several studies using both exploratory and confirmatory analyses. Some analyses included items from all three measures, while others included only ACS and/or CCS items. Some analyses also included other work-related measures along with organizational commitment. Space limitations do not allow the full reporting of each analysis. Instead, we outline the overall pattern of findings and address three specific issues: (1) relations among the commitment measures and related measures, (2) the factor structure of the continuance commitment measure, and (3) the stability of the factor structures across time.

Relations among the ACS, CCS, NCS, and Related Measures

Results of the exploratory analyses indicate that the items making up the three commitment measures load on separate factors. Reilly and Orsak (1991), for example, conducted their analysis on responses to the 24 commitment items and the 7 items from Blau's (1988) career commitment measure. They reported the presence of four clearly defined factors, each representing one of the four measures included in the analysis. Other exploratory factor analyses have shown that: (a) the ACS items are distinct from related measures assessing career, job, and work value constructs (Blau et al., 1993), (b) ACS items are distinct from CCS items (McGee & Ford, 1987), (c) ACS and NCS

TABLE 1
Internal Consistency Reliabilities for Affective, Continuance,
and Normative Commitment Scales

Commitment measure ^a			
ACS	CCS	NCS	Reference/sample
.79	.79	.79	Allen & Lee (1993)*
.87	.75	.79	Allen & Meyer (1990) Sample 1
.86	.82	.73	Sample 2
.82	.81	.74	Allen & Smith (1987)
—	.84	—	Aven (1988)
.80 (time 1)	—	—	Blau, Paul, & St. John (1993)
.81 (time 2)	—	—	
.89	—	—	Carson & Bedeian (1994)
.79	.69	.65	Cohen (1993)
.74–.87	.73–.81	.67–.78	Dunham, Grube, & Castaneda (1994) ^b
.81	.69	.74	Finegan (1994)*
.86	.72	—	Gellatly (1995)
.85	—	—	Greenberg (1994)
			Hackett, Bycio, & Hausdorf (1994)
.86	.79	.73	Sample 1
.84	.75	.75	Sample 2
.88	.81	—	Jayne (1994)
.74	—	—	Jenkins (1993)
.85	—	—	Kelloway & Barling (1992)
.89	.85	—	Konovsky & Cropanzano (1991)
.86	.78	.67	Lee (1992)
.88	.81	.78	Lynn (1992)
.83	.84	.71	McDonald (1993)
.84	.75	—	Magazine, Williams, & Williams (in press)
.88	.70	—	McGee & Ford (1987)
.82	.74	.83	Meyer, Allen, & Smith (1993)*
.82 (1 month)	.82 (1 month)	—	Meyer, Bobocel, & Allen (1991)
.84 (6 months)	.79 (6 months)	—	
.88 (11 months)	.82 (11 months)	—	
.77 (1 month)	.73 (1 month)	.68 (1 month)	Meyer, Irving, & Allen (1993)
.83 (6 months)	.74 (6 months)	.69 (6 months)	
.85 (12 months)	.72 (12 months)	.74 (12 months)	
.74	.69	—	Meyer, Paunonen, Gellatly, Goffin, & Jackson (1989)
.85	.71	—	Moorman, Niehoff, & Organ (1993)
.85	—	.68	Morrison (1994)

TABLE 1—*Continued*

Commitment measure ^a			
ACS	CCS	NCS	Reference/sample
.88	.83	.52	Randall, Fedor, & Longenecker (1990)
.84	.80	.76	Reilly & Orsak (1991)
.87	.79	—	Shim & Steers (1994)
.88	.81	—	Sample 1
.90	.83	—	Sample 2
.81	.74	.71	Shore & Tetrick (1991)
.76 (1 day)	.75 (1 day)	—	Somers (1993a; 1993b)
.86 (3 months)	.82 (3 months)	—	Vandenberg & Self (1993)
.89 (6 months)	.79 (6 months)	—	
—	.83	—	Wahn (1993)
.86	.81	—	Whitener & Walz (1993)
.89	.76	—	Withey (1988)

Note. ACS, Affective Commitment Scale; CCS, Continuance Commitment Scales; NCS, Normative Commitment Scale.

^a The three studies indicated with an asterisk used the six-item versions of the commitment scales. All others used the original eight-item scales.

^b Research conducted by Dunham et al. (1994) included nine separate samples; reprinted here are the range of reliabilities across these samples.

items load on the same factor, but are distinct from CCS items (Cohen, 1993), and (d) ACS, CCS, and NCS items load appropriately on three factors (Allen & Lee, 1993).

Consistent with the above, results of confirmatory factor analyses demonstrated that the ACS and CCS (Meyer, Allen, & Gellatly, 1990; Moorman, Niehoff, & Organ, 1993; Shore & Tetrick, 1991; Somers, 1993a), and the ACS, CCS, and NCS (Dunham, Grube, & Castaneda, 1994; Hackett et al., 1994; Lee, 1992; Meyer, Allen, & Smith, 1993) load on separate factors. Further, Shore and Tetrick (1991) provided evidence for the distinction between the ACS, the CCS, job satisfaction, and perceived organizational support. As expected, the Organizational Commitment Questionnaire (OCQ) and the ACS were highly correlated. A similar pattern was observed in those samples to whom Dunham et al. (1994) administered the OCQ; the OCQ converged with the ACS but was distinct from the CCS and NCS. Also, consistent with prediction, Aven (1988) found that CCS items did not load on the same factor as items from either the OCQ or the Hrebiniak and Alutto (1972) commitment measure.³ Finally, in a recent study of organizational and

³ Although the Hrebiniak and Alutto (1972) measure has been described as a measure of cost-based commitment, the evidence suggests that this is not the case (Meyer & Allen, 1984; Stebbins, 1970).

TABLE 2
Test-Retest Reliabilities for Commitment Measures

Measure	Reliabilities			Timing of measures	Reference
	rt ₁₂	rt ₁₃	rt ₂₃		
ACS	.94			7 weeks apart (average tenure = 5.5 years)	Blau et al. (1993)
ACS	.68	.62	.78	1, 6, and 11 months post-entry	Meyer et al. (1991)
CCS	.71	.63	.72		
ACS	.66	.61	.73	1, 6, and 12 months post entry	Meyer et al. (1993)
CCS	.56	.58	.67		
NCS	.61	.62	.73		
ACS	.48	.38	.77	1 day and 3 and 6 months post entry	Vandenberg & Self (1993)
CCS	.44	.44	.63		

occupational commitment, Meyer et al. (1993) reported that the best fit to the data was provided by a six-factor solution involving the three organizational commitment measures and three parallel occupational commitment measures.⁴ These results not only provide further evidence of the distinction among the three forms of commitment but also that the measures are sensitive to the particular foci in question.

Dimensionality of the Continuance Commitment Scale

The findings of the factor analytic studies are less clear with regard to whether or not one of the measures, the CCS, represents a unidimensional construct. The dimensionality of this measure was examined first by McGee and Ford (1987) who reported results from two exploratory factor analyses of the same data set. In the first analysis, two factors were specified and the results supported an ACS/CCS distinction. In the second, the number of factors to be extracted was not specified. Three of the four factors produced in this analysis were interpretable and supported a distinction between the ACS and two “dimensions” of the CCS, “the first based on perceptions that few employment alternatives exist and the second on high personal sacrifice associated with leaving the organization” (McGee & Ford, 1987, p. 640).

Since McGee and Ford’s (1987) impactful study, the dimensionality of the CCS has received scrutiny using confirmatory factor analysis (Hackett et al., 1994; Dunham et al., 1994; Meyer et al., 1990; Somers, 1993a). At issue here is whether the CCS measures a unitary commitment construct or two separable commitment constructs, one that develops from the employee’s

⁴ This study used the six-item versions of the commitment measures.

recognition that alternatives are few (CCS:LoAlt) and the other from a recognition that the employee's investments in the organization would be sacrificed if he or she left (CCS:HiSac).

Meyer et al. (1990) used confirmatory factor analysis to compare several models describing the CCS data taken from three independent samples. Although the one-factor model provided a good fit to the data, the best fit was provided by an oblique two-factor model (CCS:LoAlt and CCS:HiSac items as separate factors). Interestingly, however, an orthogonal two-factor model provided a poor fit, suggesting that the two continuance commitment facets are not independent. (The correlation between the two CCS factors was .817.) More recently, Somers (1993a) used both the ACS and CCS and compared a two-factor model (ACS, CCS) and a three-factor model (ACS, CCS:LoAlt, CCS:HiSac). Again, although the fit indices associated with the model treating the CCS as unidimensional were acceptably high, fit improved when two continuance commitment factors were specified. Using only the CCS items, Dunham et al. (1994) conducted separate confirmatory factor analyses on data from six samples (and a multigroup analysis). They found consistent evidence favoring a two-factor oblique model over both a one-factor model and a two-factor orthogonal model. Finally, Hackett et al. (1994) applied confirmatory factor analyses to all three commitment measures and compared the fit of one-, three-, and four-factor models. They found that a four-factor model provided the best fit to the data, again supporting a two-dimensional CCS structure.

Overall, therefore, a model hypothesizing a two-dimensional CCS structure clearly provides a better fit to the data than does a unidimensional model. Across all studies, however, this superiority is modest, and the two factors are highly related.

Finally, as important as the issue of relative fit is the question of whether the two "subscales" of the CCS correlate differently with variables of interest. Apparently, they are differentially related to the ACS (McGee & Ford, 1987; Meyer et al., 1990). This has also been examined with respect to "consequence" variables including job performance (Meyer et al., 1989; Hackett et al., 1994), absenteeism (Hackett et al., 1994), turnover intention (Allen & Lee, 1993; Somers, 1993b), and quality of nonwork life (Allen & Lee, 1993). In all cases, the correlations found between the variables in question and one subscale paralleled those found with the other subscale and with the total CCS. Thus, although there appears to be evidence for two strongly related continuance commitment factors, the practical implications of treating the two factors separately have yet to be demonstrated.

Stability of Factor Structures over Time

We turn now to confirmatory factor analytic evidence relevant to the interpretation of change, over time, in the commitment measures. Change in the mean scores of self-report attitude measures are often considered evidence of true change in those attitudes (i.e., what Golembiewski, Billingsley, &

Yeager, 1976, referred to as alpha change). Such change in mean scores, however, may also be due to change in the factor structure of a measurement instrument (gamma change) or to change in the metric being used from one administration to another (beta change), or both. If gamma or beta change is extensive, interpretation of mean score change is meaningless. If, however, gamma or beta change is modest, it can be controlled in analyses designed to detect alpha change.

Schmitt (1982; Schmitt, Pulakos, & Lieblein, 1984) demonstrated how analysis of covariance structures (confirmatory factor analysis) can be used to detect beta and gamma change in scores on self-report measures obtained on different administrations. Recently, Vandenberg and Self (1993) used a variation of this procedure to examine change in the organizational commitment of newcomers to a large financial institution. They measured the commitment of newcomers to the organization on three occasions: on the first day, after 3 months, and after 6 months on the job. For both the ACS and CCS, they argued that there was sufficient evidence for gamma and beta change to question seriously the interpretation of change in mean scores over time. Further, they reported that the factor structure of these two measures varied across the three administrations. On the basis of these findings, Vandenberg and Self questioned whether the constructs being measured by the ACS and CCS are indeed stable, at least during the early period of employment.

More recently, Meyer and Gardner (1994) performed the same confirmatory factor analytic procedures as Vandenberg and Self (1993) on data obtained from employees on three occasions during their first year of employment (1, 6, and 12 months). They found minimal evidence of gamma and beta change. Moreover, their analysis of the factor structure of the ACS and CCS across administrations yielded the same results as those obtained in the studies described above; a one-factor model provided a good fit to the data for the ACS, whereas an oblique two-factor model provided a good fit to the data for the CCS. Although these two studies differed in several ways, Meyer and Gardner suggested that the most obvious explanation for the discrepant findings is that Vandenberg and Self's initial administration of the instrument was on the first day of employment. This measure might best be seen as propensity to become committed rather than commitment per se. Meyer and Gardner argued that their findings suggest that the ACS and CCS are useful instruments for the investigation of change in commitment during the early employment period but cautioned that, given the conflicting evidence, it would be wise to continue to test for gamma and beta change on a case-by-case basis until sufficient evidence across studies indicates that this is no longer necessary.

Summary

Three issues were addressed in this section. On the basis of factor analytic research, it appears that, as expected, the three measures are distinguishable from each other. Factor analyses also show that the CCS comprises two highly

related factors. The practical implications of this, however, are not clear and require further research. Finally, the conflicting evidence regarding the temporal stability of the ACS and CCS suggests that researchers examining change in commitment among newcomers should test and, if necessary, control for beta and gamma change. We turn now to an examination of links between the commitment measures and measures of other constructs.

Commitment and Its Relations to Other Constructs: A Nomological Net

As noted earlier, the three-component model of organizational commitment (Meyer & Allen, 1991) provides a nomological net (Cronbach & Meehl, 1955) that can be used to evaluate further the construct validity of the commitment measures. These measures have been used to address a variety of research questions. Thus, in most cases, the number of studies examining a particular relation is not yet sufficient for meta-analytic review. Our objective, therefore, was to examine the pattern of findings across studies. Evidence for construct validity is provided to the extent that correlations between the commitment measures and other variables parallel those outlined in the model.

In this section of the paper, we outline the general predictions that are of relevance to particular sets of variables and examine the pattern of correlations between the commitment measures and: (a) other attitude measures, (b) work-related characteristics, (c) turnover intentions and turnover, (d) other work-related behavior, and (e) nonwork variables.

Relations with Other Attitude Measures

Although the various work attitude constructs that have been discussed in the literature have different foci (e.g., the job, the organization, the occupation), most are affective in nature. Consequently, we would expect some convergence between the measures used to assess these constructs and the measure of affective commitment to the organization. Despite this, affective measures with foci other than the organization should be empirically discernible from the ACS, while those that focus on emotional attachment to the organization, such as the Organizational Commitment Questionnaire, should correlate strongly with the ACS. Though normative commitment is based on obligation, not affect, it does appear to overlap somewhat with affective commitment; thus, it is expected that NCS scores would be correlated modestly with other affective measures (including the OCQ). Continuance commitment, on the other hand, is considered to be affectively neutral: though one may feel that the costs associated with leaving would be high, this, in itself, does not necessarily generate positive or negative feelings toward the domain in question. CCS scores, therefore, would be expected to share very little variance with these other work attitude measures.

Shown in Table 3 are the correlations between the commitment measures and other attitude measures. Several aspects of these data merit comment. First, the strong relations between the OCQ and the ACS are entirely consistent with expectation and provide evidence for convergent validity. Also

TABLE 3
Correlations between Commitment Measures and Other Attitude Measures

Attitude measure	Commitment measure			Reference/sample
	ACS	CCS	NCS	
OCQ	.83*	-.02	.51*	Allen & Meyer (1990)
	.80*	.06	.48*	Cohen (1993)
	.77-.87*	.01-.23	.37*	Dunham et al. (1994) ^a
				Hackett et al. (1994)
	.72*	-.11*	.34*	Sample 1
	.71*	-.11	.44*	Sample 2
	.80*	-.06	.54*	Lee (1992)
	.89*	.28*	.53*	Randall et al. (1990)
Job satisfaction				Hackett et al. (1994)
	.51*	-.11*	.21*	Sample 1
	.64*	-.10	.37*	Sample 2
	.50*	—	—	Jenkins (1993)
	.59*	-.05	—	Konovsky & Cropanzano (1991)
	.51*	-.15*	.29*	Lee (1992)
	.55*	-.11	-.02	Lynn (1992)
	.64*	.12*	—	Moorman et al. (1993)
Job involvement	.53*	—	.32*	Morrison (1994)
	.56*	-.12*	—	Withey (1988)
	.33*	—	—	Blau et al. (1993)
	.51*	.07	.36*	Cohen (1993)
Career commitment	.52*	—	—	Carson & Bedeian (1994)
	.47*	-.10	.26*	Cohen (1993)
Positive affect	.32*	-.16	—	Cropanzano et al. (1993)
	.31*	-.11*	.10*	Reilly & Orsak (1991) ^b
Negative affect	-.18*	.08	—	Cropanzano et al. (1993)
	-.17*	.08	-.06	Reilly & Orsak (1991)

Note. OCQ, Organizational Commitment Questionnaire.

^a Reported here are ranges of correlations found across several samples in the Dunham et al. (1994) research.

^b Correlations in the Reilly & Orsak (1991) study involved factor scores associated with the three commitment measures rather than scale scores.

* $p < .05$.

consistent with expectation is that these (affective) attitude measures correlate moderately with the NCS and very little with the CCS. Thus, evidence for discriminant validity is provided.

Second, the ACS correlates with measures reflecting affective reactions to other foci (e.g., job satisfaction, career commitment). As there are many reasons one could have similar feelings toward the organization and other “units” within it, this is not at all unexpected. Further, consistent with previ-

ous research (e.g., Brooke, Russell, & Price, 1988; Mathieu, 1991), the magnitude of these correlations suggest that affective commitment to the organization is related to, but distinguishable from, other work attitude variables. Finally, recall the factor analytic results, described above; these provide clear evidence that respondents distinguish between the ACS and commitment to the career (Reilly & Orsak, 1991), career, job, and work values (Blau et al., 1993), job satisfaction (Shore & Tetrick, 1991), and occupational commitment (Meyer et al., 1993).

Third, as expected, the CCS and NCS correlate weakly with other attitude measures; this provides further evidence of discriminant validity. Unfortunately, however, there is nothing in these data to address the issue of convergent validity. This is due, quite simply, to the fact that few comparable measures exist. Although the Ritzer and Trice (1969) and Hrebiniak and Alutto (1972) measures were purportedly developed to assess cost-based commitment, their validity has been questioned (Meyer & Allen, 1984; Morrow, 1993; Stebbins, 1970). With respect to obligation-based (normative) commitment, only one other such measure appears in the literature. To our knowledge, this measure, developed by Wiener and Vardi (1980), has not been used in conjunction with the NCS or the other two commitment measures.

Finally, two studies examined commitment and dispositional affect (Cropanzano, James & Konovsky, 1993; Reilly & Orsak, 1991). As would be expected, the ACS was positively correlated with positive affect and negatively correlated with negative affect. Of the four correlations involving the CCS, however, only one was significant. This pattern is consistent with the view of continuance commitment as an affectively neutral construct.

Relations with Work-Related Characteristics

Within the theoretical framework that guided the development of the commitment measures, work experience variables are seen as "antecedents" of commitment. Given that they describe such psychologically different orientations toward the organization, affective, continuance, and normative commitment are expected to develop on the basis of quite different experiences (Meyer & Allen, 1991). Specifically, affective commitment is expected to be correlated with those work experiences in, and characteristics of, the organization that make the employee feel "psychologically comfortable" (e.g., approachable managers, equitable treatment of employees) and that enhance his or her sense of competence (e.g., challenging tasks, feedback). Continuance commitment, on the other hand, purportedly develops on the basis of the employee's recognition of the investments he or she has made in the organization (e.g., time and effort, pension contributions) and/or the lack of comparable employment alternatives. In the case of normative commitment, experiences within the specific organizational domain may be somewhat less influential than are other earlier experiences. Indeed, it is expected that normative commitment develops on the basis of those socialization experiences in the individual's early life that encourage sustained commitment to one's em-

ployer. This includes both family-based experiences concerning work (e.g., parents who stress loyalty to one's organization) and culturally based experiences (e.g., cultural sanctions against "job-hopping"). Normative commitment may also be increased, however, by those experiences within the organization that make employees feel that their employer is providing them with more than they can easily reciprocate.

A wide variety of work-related experiences and perceptions, across several studies, have been examined in conjunction with the ACS, the CCS, and, to a lesser extent, the NCS. Findings involving these variables are summarized in Table 4. First, it will be noted that many of the variables that have been examined in conjunction with two or more commitment measures are differentially related to those measures. This complements the factor analytic evidence, described earlier, and provides additional evidence that the measures assess three different constructs.

Second, the pattern of relations generally supports hypotheses about the antecedents of the commitment constructs. The picture that emerges with respect to the ACS is that it shares variance with variables that are consensually seen as "desirable" (e.g., supportive and dependable supervisors, challenging work, fair treatment). This is consistent with meta-analytic evidence based on studies using the OCQ (Mathieu & Zajac, 1990). Wide-ranging experiences have been examined. Procedural justice, for example, has been assessed generally (Moorman et al., 1993) and with respect to specific issues such as drug testing (Konovsky & Cropanzano, 1991) and pay (Lynn, 1992). Many of these "desirable" variables are also correlated, albeit more modestly, with NCS scores. Consistent with theoretical predictions, however, they typically do not correlate significantly with CCS scores. Thus, continuance commitment cannot reasonably be seen as a negative reaction to poor work experiences. Also consistent with predictions is the finding that, across most studies, CCS scores are correlated with those experiences that "tie" individuals to the organization, such as recognizing a paucity of alternatives or learning organization-specific skills (Allen & Meyer, 1990; Lee, 1992; Withey, 1988).

Relations with Turnover Intentions and Turnover

Shown in Table 5 are the correlations between commitment measures and both turnover intentions and actual employee turnover.

Turnover intention. Although the measure used to assess turnover intention has varied across studies, it is related consistently to affective commitment. Correlations range from $-.29$ to $-.61$ and all are significant. A similar pattern (based on fewer samples) exists for normative commitment; correlations range from $-.20$ to $-.38$ and all are significant. Correlations between continuance commitment and turnover intentions are less consistent across studies, ranging from $.00$ to $-.42$. Nonetheless, of the correlations reported from nine independent samples, six are significant and in the expected direction.

Turnover. The relation between commitment and actual turnover was examined in two studies. Somers (1993b) administered all three commitment mea-

TABLE 4
Correlations between Commitment Measures and Work-Related Characteristics

Characteristic	Commitment measure			Reference/sample
	ACS	CCS	NCS	
Organizational support/leadership				
Management receptiveness	.48*	−.16*	.20*	Allen & Meyer (1990)
Organizational dependability	.61*	−.04	.38*	Allen & Meyer (1990)
Transformational leadership	.39−.45*	−.03−.05	.14*−.17*	Bycio, Hackett, & Allen (1995) ^a
Transactional leadership	−.22−.36*	−.06−.13*	−.07−.20*	
Organizational dependability	.56*	−.13*	.47*	Lee (1992)
Organizational support	.64*	−.08	—	Shore & Wayne (1993)
Support from supervisors	.43*	−.08	—	Withey (1988)
Competence-related variables				
Feedback	.36*	−.18*	.21*	Allen & Meyer (1990)
Goal difficulty	.56*	−.17*	.25*	Allen & Meyer (1990)
Job challenge	.63*	−.14*	.29*	Allen & Meyer (1990)
Challenge	.47*	−.13*	.29*	Lee (1992)
Feedback	.38*	−.03	.29*	Lee (1992)
Challenge	.59*	−.16	.19*	Meyer, Irving, & Allen (1993)
Justice variables				
Interactional	.51*	−.10	—	Gellatly (1995)
Procedural (lay-off)	.08	—	—	Kelloway & Barling (1992)
Distributive (lay-off)	.20*	—	—	Kelloway & Barling (1992)
Procedural (drug-testing)	.44*	−.09	—	Konovsky & Cropanzano (1991)
Distributive (pay)	.39*	−.07	.00	Lynn (1992)
Procedural (pay)	.52*	−.14*	.25*	Lynn (1992)
Procedural	.50*	.09*	—	Moorman et al. (1993)
Role-related variables				
Role clarity	.53*	−.11	.39*	Allen & Meyer (1990)
Role ambiguity	−.48*	.09	−.31*	Lee (1992)
Employment alternatives				
Perceived alternatives	−.13*	−.43*	−.08	Allen & Meyer (1990)
Perceived alternatives	.09	−.28*	−.01	Lee (1992)
Availability of alternatives (unemployment rate)	.03	.01	—	Whitener & Walz (1993)
Specificity/transferability variables				
Skills transferability	.25*	−.20*	.19*	Allen & Meyer (1990)
Education transferability	−.02	−.12*	.03	Lee (1992)
Skills transferability	.13*	−.35*	.08	Lee (1992)
Specificity of skills	−.07	.28*	—	Withey (1988)

^a Bycio et al. (1995) administered three measures of transformational leadership and two measures of transactional leadership. Reported here are the ranges of correlations involving these measures.

* $p < .05$.

TABLE 5
Correlations between Commitment Measures and Turnover Variables

Turnover variable	Commitment Measures			Reference
	ACS	CCS	NCS	
Turnover intention	-.41*	-.11*	-.38*	Allen & Lee (1993)
	-.60*	—	—	Carson & Bedeian (1994)
	-.45*	-.08	-.20*	Cohen (1993)
	-.42*	-.08*	-.24*	Hackett et al. (1994)
	-.35*	—	—	Jenkins (1993)
	-.33*	—	—	Kelloway & Barling (1992)
	.47*	.00	—	Konovsky & Cropanzano (1991)
	-.29*	-.15*	-.32*	Lee (1992)
	-.49*	-.42*	-.24*	McDonald (1993)
	-.45*	-.02	-.34*	Meyer, Allen, & Smith (1993)
	-.61*	-.22*	—	Whitener & Walz (1993)
Intention to remain	.39*	.13*	.32*	Somer (1993b) ^a
Turnover	-.19*	-.07	-.17*	Somers (1993b)
	-.26*	-.16*	—	Whitener & Walz (1993)

^a Somers (1993b) correlated commitment scales with intentions to remain for 1, 2, and 5 years. All nine correlations were significant ($p < .05$). The mean correlations across the three intention measures are reported here.

* $p < .05$.

tures to a large sample of nurses and collected voluntary turnover data approximately 1 year later. Turnover was significantly related to the ACS and the NCS, but not the CCS. Whitener and Walz (1993) administered the ACS and CCS to a sample of bank tellers 1 year prior to obtaining voluntary turnover data and reported significant negative correlations between turnover and both commitment measures.

Relations with Other Work-Related Behavior

While turnover is still an important outcome variable, it is now recognized that not all turnover is dysfunctional (e.g., Dalton, Krackhardt, & Porter, 1981) and that what employees do while they are with the organization is as important as, if not more important than, how long they stay. Looking beyond employee retention, therefore, Meyer and Allen (1991) argued that the three components of commitment could have quite different consequences for work-related behavior. Indeed, an advantage of distinguishing among the components of commitment lies not with their relative ability to predict turnover but, instead, with their implications for on-the-job behavior.

First, Meyer and Allen (1991) hypothesized that while affective commitment and normative commitment would be positively correlated with performance, continuance commitment would be either unrelated, or negatively

related, to performance—except in cases where job retention was clearly contingent on performance. It should be noted that normative commitment is expected to have less influence on the quantity or quality of work and more on the “tone” with which the work is carried out. For example, the felt obligation associated with normative commitment may carry with it a resentment toward the organization that pervades, but does not directly impede, the performance of particular duties (e.g., those that the employee least enjoys). Further, it was hypothesized that employees with strong affective commitment would be more likely to engage in extra-role (Katz, 1964), or organizational citizenship (Organ, 1988), behavior than those with weak affective commitment. Normative commitment should also be related, albeit less strongly, to such behavior. Given that extra-role behavior has no explicit implications for job retention, we would expect continuance commitment to be either unrelated or negatively related to it. Finally, it is expected that work attendance will be positively associated with affective and normative commitment, but not continuance commitment.

In summarizing the results of studies that have examined the behavioral correlates of commitment (see Table 6), we distinguish between self-reports and independent assessments of two types of work-related behavior, work performance and absenteeism.

Work performance: self-report measures. Several researchers have examined citizenship, or extra-role, behavior. Such behaviors quite consistently correlate positively with affective commitment, correlate less consistently with normative commitment, and are either unrelated or negatively related to continuance commitment (Allen & Smith, 1987; Lee, 1992; McDonald, 1993; Meyer et al., 1993). An interesting approach to extra-role behavior was taken recently by Morrison (1994) who argued that the boundary between extra-role behavior and in-role behavior is unclear and, thus, may vary across employees as a function of work attitudes. Morrison predicted, and found, that employees with strong affective and normative commitment defined their jobs more broadly (i.e., considered “extra-role” behavior to be in-role) and were more likely to engage in these behaviors.

Commitment is also linked to the way employees respond to dissatisfaction at work. Drawing on the work of Hirschman (1970) and Farrell (1983), Meyer et al. (1993) examined three such responses: voice, loyalty, and neglect. Both affective and normative commitment were positively related to willingness to suggest improvements (voice) and to accept things as they were (loyalty) and negatively related to passive withdrawal from the dissatisfying situation (neglect). Interestingly, continuance commitment was positively related to the neglect response. Somewhat related to this latter finding is Wahn’s (1993) report that continuance commitment was positively related to employees’ overall estimates of the frequency with which they engaged in particular unethical behaviors. This composite measure had two components. CCS scores were unrelated to behaviors involving “serving one’s interests at the expense of others” (p. 248) (e.g., passing on blame to a co-worker), but were

TABLE 6
Correlations between Commitment Measures and Performance Indicators

Performance indicator	Commitment measure			Reference/measure
	ACS	CCS	NCS	
Work performance				
Self-report measures				Allen & Smith (1987)
	.25*	-.14*	.07	Resourcefulness/ innovation
	.12*	-.07	.16*	Consideration for others
	.46*	-.12*	.32*	Lee (1992)
	.27*	-.08	.20*	Spontaneity
	.29*	.09	.23*	Helping behavior
	.14*	.00	-.12*	Job performance
	.33*	-.13	.17	McDonald (1993)
	.23	-.04	.17*	Organizational citizenship
	.41*	-.03	.40*	Meyer & Allen (1986)
	-.38*	.25*	-.23*	Extra-role behavior
	.10	-.06	.00	Meyer, Allen, & Smith (1993)
	.13*	.08	.11*	Voice
	.07	-.15*	.14*	Loyalty
	.21*-.30*	—	.09-.22*	Neglect
	.22*-.27*	—	.08-.24*	Helping others
	—	.14*	—	Use of time
Independent measures	—	.14*	—	Professional activity
	-.01	-.21*	-.16	Morrison (1994) ^a
	-.17	-.01	-.03	Job breadth
	-.15	-.00	-.18	Work behavior
	-.03	-.07	-.12	Wahn (1993)
	.28*	-.20*	—	Unethical behavior
	.15	-.25*	—	Hackett et al. (1994)
	.23*	-.25*	—	Commendations
	.23*	-.46*	—	Complaints
	.16*-.28*	.05-.14*	—	Accidents/year
	.16*	.06	—	Incognito performance rating
	.31*	-.15*	—	Konovsky & Cropanzano (1991)
	.26*	-.17*	—	Performance
				Meyer et al. (1989)
				Composite performance
				Overall performance
				Promotability
				Moorman et al. (1993) ^a
				Citizenship behavior
				In-role behavior
				Shim & Steers (1994)
				Sample 1
				Composite performance
				Overall performance

TABLE 6—*Continued*

Performance indicator	Commitment measure			Reference/measure
	ACS	CCS	NCS	
				Sample 2
	.02	-.12	—	Composite performance
	.06	-.10	—	Overall performance
	.22*	-.20*	—	Shore & Wayne (1993)
	.14*	-.20*	—	Altruism
Absenteeism				Compliance
				MacDonald (1993)
	.00	.10	.08	Frequency (No. incidents)
	-.01	.07	.04	Total days absent
				Meyer et al. (1993)
	-.13*	-.05	-.15*	Voluntary absences
	.03	.03	.08	Total days absent
				Gellatly (1995)
	-.18*	.09	—	Frequency (No. incidents)
	-.14*	.04	—	Total days absent
				Hackett et al. (1994)
	-.22*	.04	-.09	Culpable absences
	-.07	.13	.14	Nonculpable absences
Independent measures				Somers (1993b)
	-.07	.01	.02	Frequency (No. incidents)
	-.15*	.05	-.07	Annexed absences

^a Research conducted by Morrison (1994) and Moorman et al. (1993) involved several comparable measures; reported here are the ranges of correlations across measures.

* $p < .05$.

positively related to compliance with organizational requests (e.g., behavior deemed “against the interests of the general public to protect your organization”, p. 249).

Work performance: independent measures. Findings from the studies in which the focal persons’ behavior was assessed independently (e.g., by supervisors) parallel closely those found with the self-report data. Specifically, significant positive relations have been reported between employees’ ACS scores and their supervisors’ ratings of their overall performance of in-role behavior (Konovsky & Cropanzano, 1991; Meyer et al., 1989; Moorman et al., 1993), potential for promotion (Meyer et al., 1989), and citizenship behavior (Moorman et al., 1993; Shore & Wayne, 1993). In contrast, significant negative relations were reported between employees’ CCS scores and supervisory ratings of citizenship (extra-role) behavior and job performance in some (Konovsky & Cropanzano, 1991; Meyer et al., 1989, Shim & Steers, 1994; Shore & Wayne, 1993), but not all (Moorman et al., 1993; Shim & Steers, 1994), samples.

This finding—that ACS scores are positively, and CCS scores negatively, correlated with supervisory ratings—is interesting in light of the Shim and Steers (1994) study. Only one of the two organizations they studied showed this pattern. Follow-up interviews revealed that the organization in which commitment was related to performance placed much more emphasis on satisfying customers and continuous performance improvement. Shim and Steers suggested that this emphasis may have provided, to employees, clear directives about how best to express their commitment, something lacking in the other organization. Although reasonable, this finding obviously requires replication. Further, it is not clear why the observed management differences between the organizations would moderate the links between continuance commitment and performance.

Finally, Hackett et al. (1994) used a “trained incognito rater” to assess the performance of bus drivers on a single occasion. This measure was not correlated with any commitment measure, nor was the number of performance complaints bus drivers had received since being hired. The number of commendations drivers received over their tenure, however, was negatively related to their CCS scores and, when the effects of control variables (age and tenure) were removed, ACS scores were negatively correlated with the number of accidents in which drivers had been involved.

Absenteeism: self-report measures. Meyer et al. (1993) reported significant, albeit modest, negative correlations between self-reports of voluntary (avoidable) absenteeism and both affective and normative commitment. In neither this study nor another (McDonald, 1993) was continuance commitment correlated with self-reported absenteeism.

Absenteeism: independent measures. Absenteeism measures obtained from actual personnel records have been examined in three recent commitment studies. Significant negative correlations were reported between affective commitment and total days absent over 12 months (Gellatly, 1995), frequency of culpable absences over 5 years (Hackett et al., 1994), and frequency of absences over 12 months in one study (Gellatly, 1995) but not another (Somers, 1993b). Somers found that affective commitment correlated negatively with the frequency, over 12 months, of annexed absences (absences on days connected to a weekend or holiday). Neither continuance nor normative commitment were significantly correlated with absenteeism in these studies.

Relations with Nonwork Variables

It has been suggested that commitment might have implications for aspects of one's life outside of work (Romzek, 1989). In a sample of police officers, Allen and Lee (1993) showed that the Satisfaction with Nonwork Scale (Romzek, 1989) was positively correlated with ACS scores, negatively correlated with CCS scores, and unrelated to NCS scores.⁴ Although this research is in its early stages, available data are at least consistent with the idea that affective commitment has some positive consequences, and continuance commitment

some negative consequences, for how people perceive aspects of their lives beyond those at work.

Finally, in a sample of working parents of young children, Jayne (1994) found that employees who strongly identified with the "provider role" had stronger continuance commitment than did those with weak identification with this role. Affective commitment was unrelated to identification with the provider role. This is consistent with the idea that continuance, but not affective, commitment is based on perceived cost. Presumably, the perceived costs associated with leaving ones' organization would be greater for those parents who felt they were the "provider" for their children.

Summary

In this above section, we presented wide-ranging evidence relevant to the construct validity of the three commitment measures. In examining evidence of this sort, one must be mindful of Schwab's (1980) caution against overinterpreting a single correlation and instead focus on patterns, across studies and measures, that make theoretical sense. Fortunately, the breadth of samples and variables examined allowed us to do this. The overall pattern of findings produced by the research described here suggests that the three commitment measures are distinguishable from other commonly used work attitude measures and relate to measures of "antecedent" and "consequence" variables largely in accordance with theoretical prediction.

CONCLUSIONS

Within the study of work attitudes and behavior, the organizational commitment construct has come to play an increasingly important role (Morrow, 1993). Thus, it is critical that the construct validity of commonly used measures of this construct are subjected to considerable scrutiny. The purpose of this paper was to examine the substantial body of evidence relevant to the construct validation of the Affective, Continuance, and Normative Commitment Scales. These measures were developed on the basis of a theoretical framework that integrated existing views of attitudinal commitment and have been used in a wide variety of samples and settings. Further, they have been critically examined, both empirically and conceptually, by a number of researchers (Cohen, 1993; Dunham et al., 1994; Hackett et al., 1994; McGee & Ford, 1987; Vandenberg & Self, 1993). Certainly, construct validation efforts have gone far beyond the "one-time or limited term project" against which Schwab (1980) cautioned organizational researchers and, instead, are represented by a large and varied set of studies that provide much relevant data.

Taken together, the data reported here strongly suggest that the continued use of the commitment measures in substantive research is justified. This does not mean, of course, that all issues regarding the ACS, CCS, and NCS are completely resolved or that continued scrutiny of the measures is not warranted. Indeed, there are several issues that merit research attention.

One such issue involves the possibility that the Continuance Commitment Scale actually consists of two subscales. Although, as indicated by Hackett et al. (1994), "the preponderance of evidence is in support of a three-component model of commitment" (p. 21), the factor analytic results cannot be ignored. To be prudent, it is suggested that researchers first determine whether the two sets of CCS items are differentially correlated with other variables before reporting results based on the full CCS (Meyer et al., 1990). While the evidence thus far suggests otherwise, there may be some antecedent or consequence variables for which a different pattern exists.

The normative commitment construct also deserves considerably more attention. Although affective and normative commitment have several common correlates, factor analytic research has shown clearly that the latter is distinguishable from both affective and continuance commitment. Unfortunately, few of the variables considered to be unique correlates of normative commitment have been examined. This can be explained, in part, by the challenges involved in collecting the relevant data. Hypothesized antecedents, for example, include variables not typically examined in organizational research such as one's early familial and cultural socialization experiences. With respect to consequences, it has been suggested (Meyer & Allen, 1991) that the unique influence of normative commitment on work behavior may not be on the quantity or quality of work performance, but on the "tone" with which work is carried out. To our knowledge, no satisfactory measure of such a subtle aspect of work behavior has been developed.

Another issue with respect to normative commitment involves its fairly substantial correlation with affective commitment. In an effort to more clearly tap into respondents' own feelings of obligation to the organization, modifications were made recently to the NCS items. This work was also motivated by a desire to shorten each of the three scales and to reduce the number of negatively keyed items (cf. Magazine, Williams, & Williams, in press). The resulting six-item versions of the measures were reported by Meyer et al. (1993) and have been used in two subsequent studies. Interestingly, Meyer and colleagues showed that self-reports of the "professional activity" (e.g., courses taken, involvement in professional associations) carried out by nurses were positively related to the shorter NCS, negatively related to the CCS, and unrelated to the ACS (see Table 6). While normative commitment to one's organization may carry with it the obligation to be involved, and remain current, in one's profession, it is unclear at this point whether this finding is due to the use of a particularly appropriate NCS correlate or to the scale revisions. In any case, the correlations between the revised versions of the ACS and NCS parallel those found with the earlier versions, suggesting that, although affective and normative commitment are clearly distinguishable constructs (as demonstrated by numerous factor analyses), they may have inherent psychological overlap. It simply may not be possible to feel a strong obligation to an organization without also having (or developing) positive emotional feelings for it. Beyond this, the revised scales appear to have

acceptable reliability and correlate as expected with other variables; clearly, however, these shorter measures await further empirical scrutiny.

Another interesting issue involves the stability, over time, of the factor structures of the measures. Although one study of newcomers reported evidence of gamma and beta change in the ACS and CCS (Vandenberg & Self, 1993), more recent research (Meyer & Gardner, 1994) found minimal evidence of this. Neither study should be accepted as the final word on this issue. Instead, we would argue that investigators using the measures in longitudinal research with newcomers should test for beta and gamma change until a greater body of relevant evidence has accumulated.

Finally, it should be noted that only one of the studies described here was conducted with employees outside North America (Lee, 1992). Although the data from this Korean study provide no evidence that the measures are culture-specific, considerably more comparative research is needed before any definitive comments can be made about this issue.

Overall, there appears to be considerable evidence regarding the construct validity of the three measures. Thus, we would argue that the ACS, CCS, and NCS are appropriate measures of organizational commitment based on emotional attachment, perceived costs, and feelings of obligation, respectively. Nonetheless, construct validation is an ongoing process. As more data are collected, it will be possible to update this narrative review with meta-analyses examining the relations between the commitment measures and both antecedent and consequence variables. The continued use of the measures should contribute to this ongoing process as well as to substantive research goals.

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